

PUTATIVE NATURAL HYBRID OF *EUPATORIUM CAPILLIFOLIUM* X *E.*
GLAUDESCENS FROM HARDIN COUNTY, TEXAS

Ray Jordan

326 Live Oak Lane, Port Arthur, Texas 77642 U.S.A.

ABSTRACT

At a site in Hardin County, Texas, *Eupatorium capillifolium* and *E. glaucescens* were found growing together. A single putative F_1 hybrid was also found. Morphological and pollen staining data strongly support the conclusion that the plant concerned is a hybrid.

KEY WORDS: *Eupatorium*, interspecific hybrids, Texas

During collection of plants from Hardin County, Texas, I encountered *Eupatorium capillifolium* (Lam.) Small (one of several species of dog fennel) and *E. glaucescens* Ell. growing together at the following site:

Lance Rosier Unit of Big Thicket, 0.6 mi E of Saratoga along highway 770, then S on dirt road 0.7 mi to fork, then left 1 mi; Growing in mixed pine-hardwood forest, 12 Oct 1991.

Only a single specimen of a putative hybrid between these two, clearly demarcated species, was found. A comparison of the salient features which distinguish the two species and putative hybrid follows.

Clearly, most of the distinguishing features are compromised in the putative hybrid, which is probably an F_1 , to judge from the fact that only a single plant was found, the pollen from which appeared mostly sterile (*i.e.*, nonstaining for cytoplasmic development).

DISCUSSION

Eupatorium capillifolium, is a widespread weed in the southeastern U.S.A., and occasionally introduced elsewhere in tropical or subtropical regions (B. Turner, pers. comm.), and yet other dog fennels are reported to hybridize among themselves and with the very distinct, *E. perfoliatum* L. Sullivan

	<i>E. capillifolium</i>	Putative hybrid	<i>E. glaucescens</i>
Midstem leaves:	compound with linear divisions	simple, deeply lobed or lacerate	simple, serrate
Capitulescence:	racemes	subglomerate racemes	glomerate
Involucral bracts:	glabrous, nonatomiferous	sparsely pubescent sparsely atomiferous	densely pubescent, atomiferous
Involucral bract apices:	acute apiculate	obtuse-apiculate	obtuse or rounded
Corolla throats:	tubular	tubulocampanulate	campanulate

(1976b) did not report hybrids involving either species reported here, but she did refer (1976a) to hybrids observed by other workers in which *E. capillifolium* was a parent. The present contribution is apparently the first report of a natural hybrid between *E. capillifolium* and *E. glaucescens*.

It should also be noted that Shinnars, in October of 1955, collected natural hybrids between *Eupatorium capillifolium* and *E. serotinum* Michx. in Shelby County, Texas, where they occurred with both parents (voucher numbers 22357, 22358, and 22359, TEX). Additional hybrids between *E. capillifolium* and these and yet other species of *Eupatorium* are likely to be found.

ACKNOWLEDGMENTS

I am grateful to Dr. Guy Nesom and Dr. B.L. Turner for help with the present paper. Vouchers are on deposit at TEX.

LITERATURE CITED

- Sullivan, V.I. 1976a. Diploidy, polyploidy, and agamospermy among species of *Eupatorium* (Compositae). *Canad. J. Bot.* 54:2907-2917.
- . 1976b. Putative hybridization in the genus *Eupatorium* (Compositae). *Rhodora* 80:513-527.